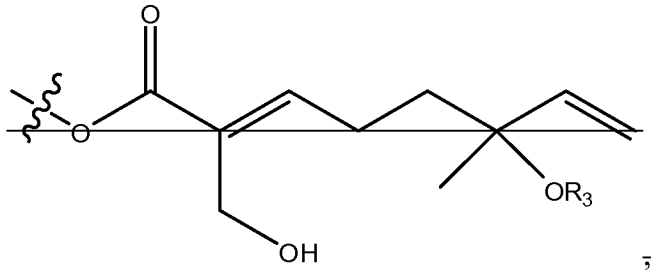
I. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings or versions thereof:

Listing of Claims:

1. (Currently Amended) A method of inhibiting inflammation in a subject comprising administering to the subject a monoterpene composition that inhibits NF-κB, wherein the subject has ~~rheumatoid arthritis or~~ inflammatory bowel disease, and wherein said composition comprises a compound having a monoterpene moiety of the formula:

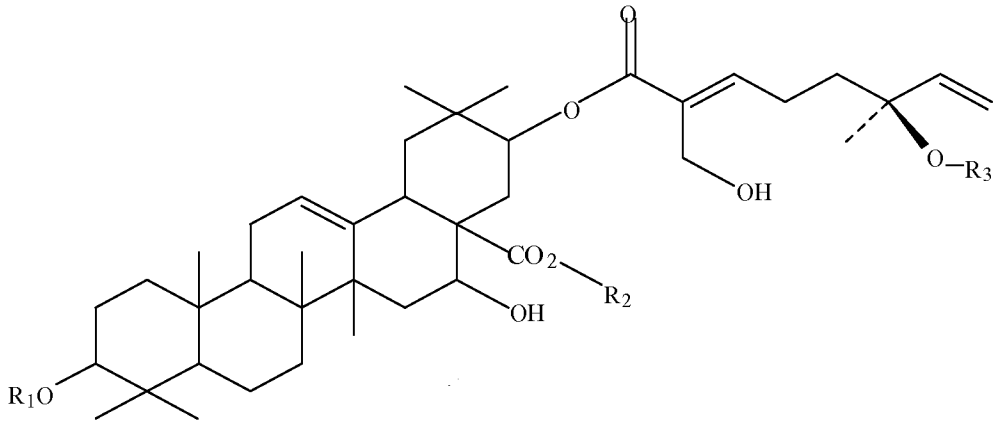


;

~~or an isomer thereof, wherein,~~

~~a) R_3 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and~~

~~b) the formula further comprises R_4, wherein R_4 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group~~



or a pharmaceutical formulation thereof, wherein

a) R_1 and R_2 are selected from the group consisting of hydrogen, C1-C5 alkyl, and an oligosaccharide;

b) R_3 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and

c) the formula further comprises R_4, wherein R_4 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group, and wherein R_4 is attached to the triterpene moiety or the monoterpene moiety.

2. (Original) The method of claim 1, wherein said NF-κB is induced by TNF.

3. (Withdrawn) The method of claim 1, wherein said composition further comprises a carrier moiety.

4. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a lipid.

5. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a membrane permeable composition.

6. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a sugar.

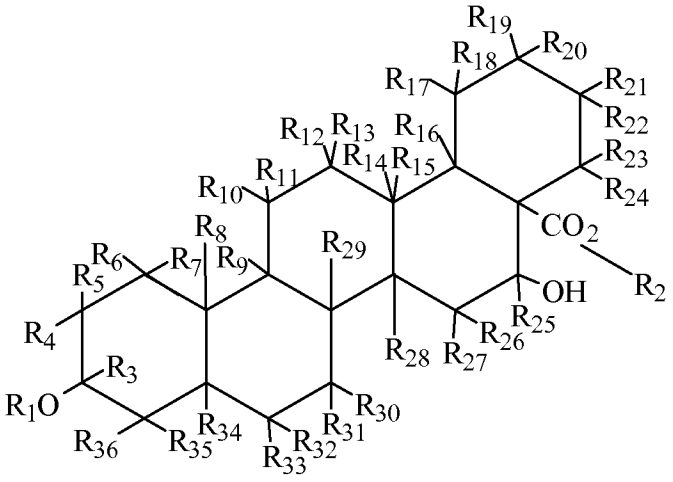
7. (Withdrawn) The method of claim 3, wherein said carrier moiety comprises a triterpene moiety.

8. (Withdrawn) The method of claim 1, wherein the monoterpene composition further comprises a triterpene moiety.

9. (Original) The method of claim 1, wherein the monoterpene composition further comprises a sugar.

10. (Original) The method of claim 1, wherein the monoterpene composition further comprises a second monoterpene moiety.

11. (Withdrawn) The method of claim 8, wherein said triterpene moiety comprises the formula:



,

or an isomer thereof wherein,

a) R_1 and R_2 are selected from the group consisting of hydrogen, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, an oligosaccharide;

b) wherein R_3-R_{36} are each separately and independently selected from the group consisting of a point of unsaturation, hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group; and

c) at least one of R_3-R_{36} is a monoterpene group.

12. (Withdrawn) The method of claim 11, wherein R_1 and R_2 each comprise an oligosaccharide.

13. (Withdrawn) The method of claim 12, wherein R_1 and R_2 each comprise a monosaccharide, a disaccharide, a trisaccharide or a tetrasaccharide.

14. (Withdrawn) The method of claim 13, wherein R_1 and R_2 each comprise an oligosaccharide comprising sugars which are separately and independently selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, N-acetyl glucosamine, and galactose.

15. (Withdrawn) The method of claim 14, wherein at least one sugar is methylated.

16. (Withdrawn) The method of claim 11, wherein R_4 is attached to the triterpene moiety through one of the methylene carbons attached to the triterpene moiety.

17. (Withdrawn) The method of claim 11, wherein said triterpene moiety further comprises at least one double bond.

18. (Withdrawn) The method of claim 11, wherein said isomer is a stereoisomer.

19. (Withdrawn) The method of claim 11, wherein said isomer is an optical isomer.

20. (Withdrawn) The method of claim 8, wherein said triterpene moiety is an acacic acid ester, a oleanolic acid ester, a betulinic acid ester, an ursolic acid ester, a quinovic acid ester, a pomolic acid ester, a rotundic acid ester, a rotungenic acid ester, a madasiatic acid ester, an asiatic acid ester, an euscaphic acid ester, a tormentic acid ester, madecassic acid ester, a lupeolic acid ester, a cylicodiscic acid ester, a mollic acid ester, a jessic acid ester, an echinocystic acid ester, or an entagenic acid ester.

21. (Cancelled)

22. (Previously Presented) The method of claim 1, wherein said isomer is a cis isomer.

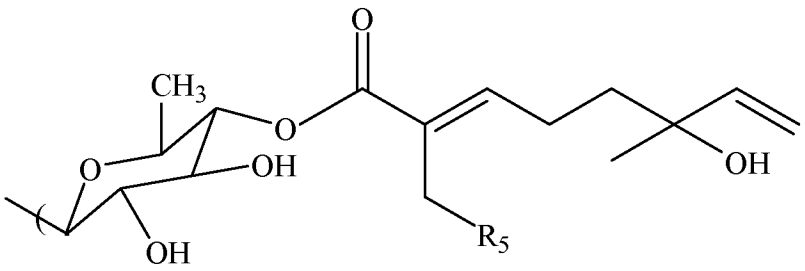
23. (Cancelled).

24. (Previously presented) The method of claim 1, wherein R_3 is a sugar.

25. (Original) The method of claim 24, wherein the sugar is selected from the group consisting of glucose, fucose, rhamnose, arabinose, xylose, quinovose, maltose, glucuronic acid, ribose, N-acetyl glucosamine, and galactose.

26. (Original) The method of claim 24, further comprising a monoterpene moiety attached to the sugar.

27. (Previously Presented) The method of claim 1, wherein R_3 has the following formula:



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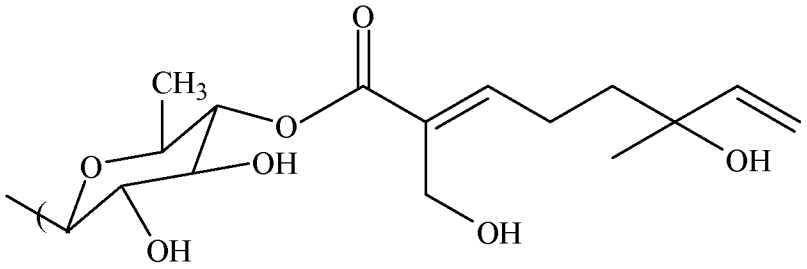
wherein R5 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group.

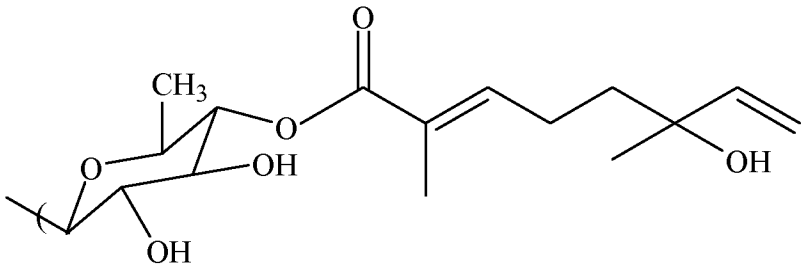
28. (Original) The method of claim 27, wherein R_5 is a hydrogen or a hydroxyl.

29-30. (Cancelled)

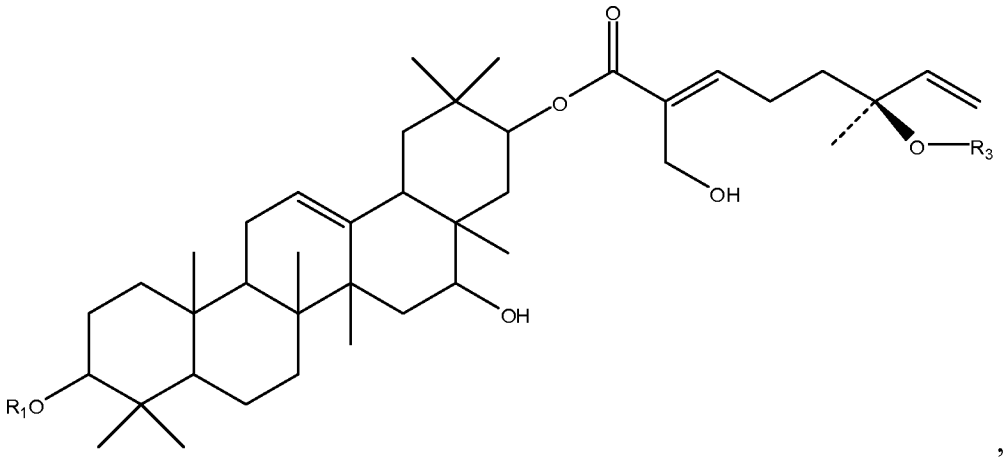
31. (Previously Presented) The method of claim 1, wherein R_3 has the following formula:



32. (Previously Presented) The method of claim 1, wherein R_3 has the following formula:



33. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:



,

or an isomer thereof, wherein,

a) R_1 and R_2 are selected from the group consisting of hydrogen, C1-C5 alkyl, and an oligosaccharide;

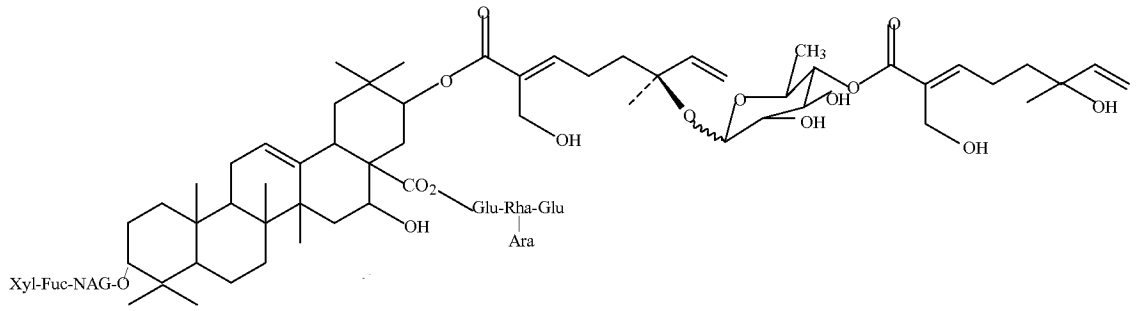
b) R_3 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, and a monoterpene group; and

c) the formula further comprises R_4, wherein R_4 is selected from the group consisting of hydrogen, hydroxyl, C1-C5 alkyl, C1-C5 alkylene, C1-C5 alkyl carbonyl, a sugar, C1-C5 alkyl ester, and a monoterpene group, and wherein R_4 may be attached to the triterpene moiety or the monoterpene moiety.

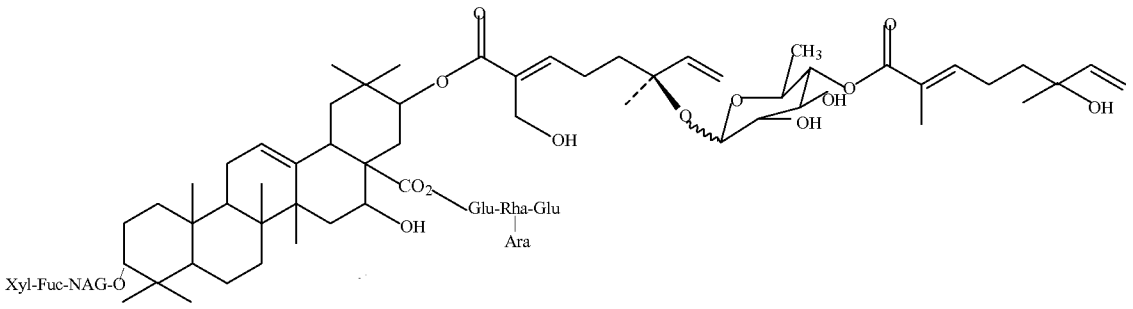
34. (Withdrawn) The method of claim 33, wherein said isomer is a stereoisomer.

35. (Withdrawn) The method of claim 33, wherein said isomer is an optical isomer.

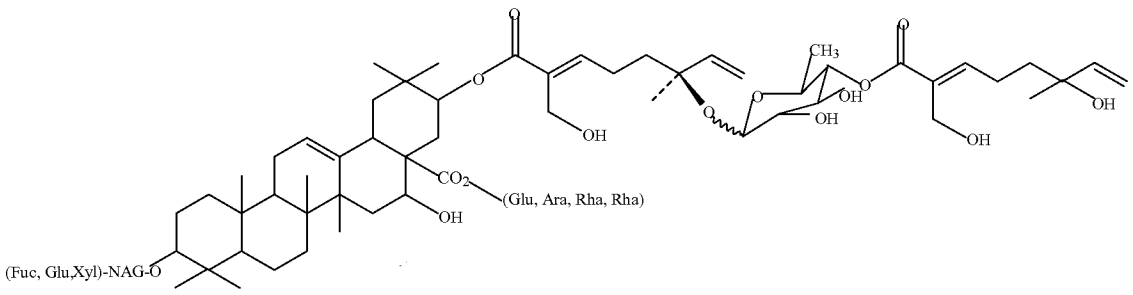
36. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:



37. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:



38. (Withdrawn) The method of claim 1, wherein said composition comprises the formula:



39. (Previously Presented) The method of claim 1, wherein the inflammation is inhibited when said composition is administered to the subject at a concentration of from about 0.5 to about 2.0 μg/ml.

40. (Cancelled)

41. (Previously Presented) The method of claim 1, wherein said subject is a human or a mouse.

42-43. (Canceled)

44. (Original) The method of claim 1, wherein said composition inhibits COX-2.

45. (Original) The method of claim 1, wherein said composition inhibits iNOS.

46. (Original) The method of claim 1, wherein said administering is local.

47. (Original) The method of claim 46, wherein said administering is by injection.

48. (Original) The method of claim 46, wherein said administering is topical.

49. (Original) The method of claim 1, wherein said administering is systemic.

50. (Original) The method of claim 1, wherein said administering is oral.

51. (Original) The method of claim 1, wherein said composition is a pharmaceutical composition in a pharmacologically acceptable medium.

52. (Original) The method of claim 51, wherein said pharmacologically acceptable medium is a buffer, a solvent, a diluent, an inert carrier, an oil, a creme, or an edible material.

53. (Withdrawn) The method of claim 52, wherein said pharmaceutical composition further comprises a targeting agent.

54. (Withdrawn) The method of claim 53, wherein said targeting agent directs delivery of said pharmaceutical composition to an inflamed cell.

55. (Withdrawn) The method of claim 7, wherein said triterpene moiety is an acacic acid ester, a oleanolic acid ester, a betulinic acid ester, an ursolic acid ester, a quinovic acid ester, a pomolic acid ester, a rotundic acid ester, a rotungenic acid ester, a madasiatic acid ester, an asiatic acid ester, an euscaphic acid ester, a tormentic acid ester, madecassic acid ester, a lupeolic acid ester, a cylicodiscic acid ester, a mollic acid ester, a jessic acid ester, an echinocystic acid ester, or an entagenic acid ester.

56. (Previously presented) The method of claim 1, wherein the compound is Avicin D.

57. (New) The method of claim 1, wherein the compound is Avicin D, Avicin G, or Avicin B.